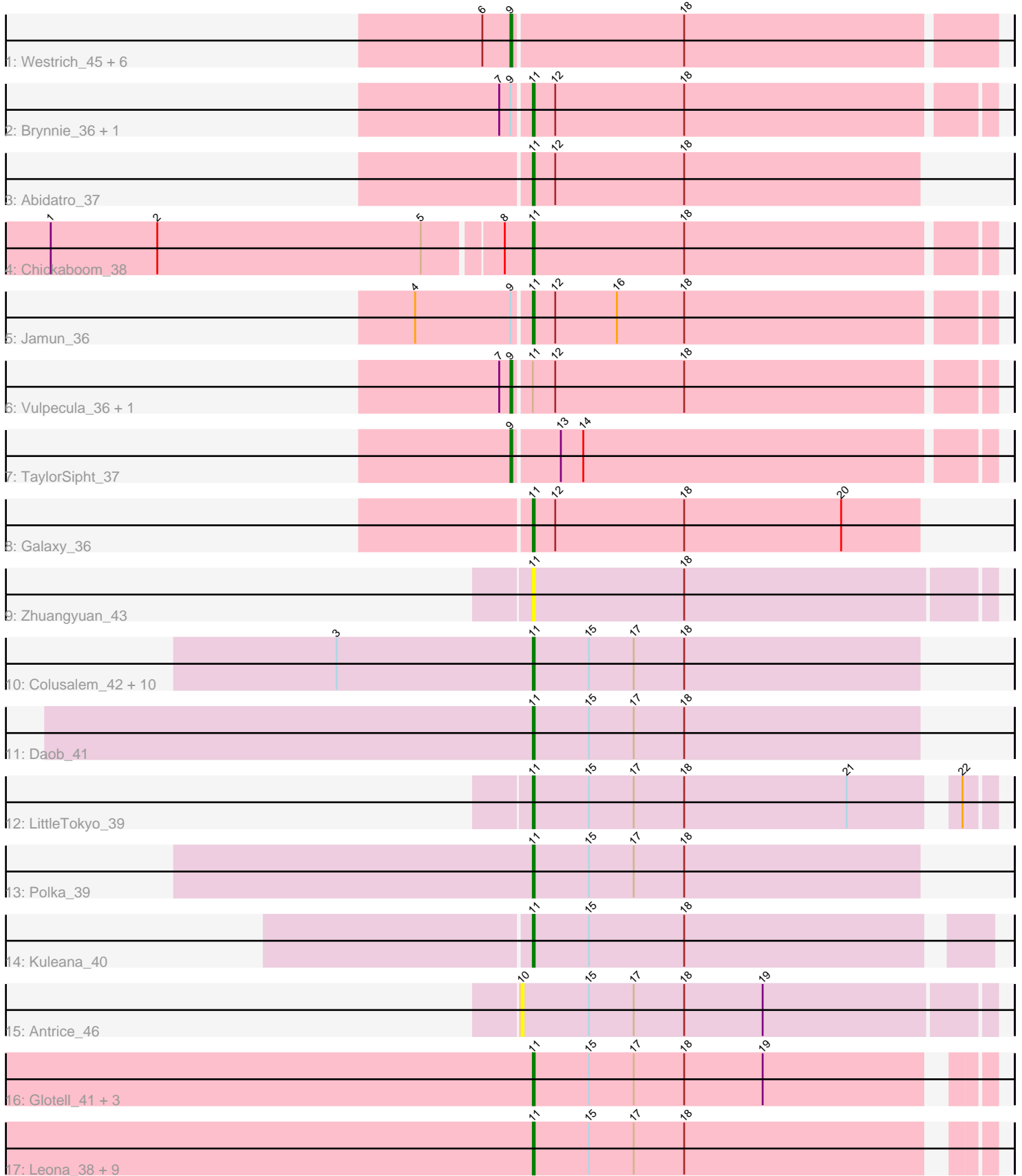


Pham 198035



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 198035 Report

This analysis was run 01/18/25 on database version 583.

Pham number 198035 has 47 members, 18 are drafts.

Phages represented in each track:

- Track 1 : Westrich\_45, Gravel\_46, Toad24\_39, Orcanus\_37, Eesa\_36, KendraB23\_47, Pelletreau\_46
- Track 2 : Brynnie\_36, Basilisk\_37
- Track 3 : Abidatro\_37
- Track 4 : Chickaboom\_38
- Track 5 : Jamun\_36
- Track 6 : Vulpecula\_36, Ruchi\_36
- Track 7 : TaylorSipht\_37
- Track 8 : Galaxy\_36
- Track 9 : Zhuangyuan\_43
- Track 10 : Colusalem\_42, Amelia\_39, Cote\_41, Coral\_39, Kepler\_41, Jerole\_49, Bibble12\_43, Lunar\_41, HannahPhantana\_40, Melons\_41, Bedetta\_44
- Track 11 : Daob\_41
- Track 12 : LittleTokyo\_39
- Track 13 : Polka\_39
- Track 14 : Kuleana\_40
- Track 15 : Antrice\_46
- Track 16 : Glotell\_41, PhluffyCoco\_39, HamCheese\_38, Rattail\_39
- Track 17 : Leona\_38, AmiCi24\_38, Juno112\_38, Atlantica\_39, Andrew\_40, Camara\_39, KHumphrey\_39, Renna12\_38, StuartMinion\_34, RedFox\_39

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 11, it was called in 24 of the 29 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Abidatro\_37, Amelia\_39, AmiCi24\_38, Andrew\_40, Atlantica\_39, Basilisk\_37, Bedetta\_44, Bibble12\_43, Brynnie\_36, Camara\_39, Chickaboom\_38, Colusalem\_42, Coral\_39, Cote\_41, Daob\_41, Galaxy\_36, Glotell\_41, HamCheese\_38, HannahPhantana\_40, Jamun\_36, Jerole\_49, Juno112\_38, KHumphrey\_39, Kepler\_41, Kuleana\_40, Leona\_38, LittleTokyo\_39, Lunar\_41, Melons\_41, PhluffyCoco\_39, Polka\_39, Rattail\_39, RedFox\_39, Renna12\_38, StuartMinion\_34, Zhuangyuan\_43,

Genes that have the "Most Annotated" start but do not call it:

- Ruchi\_36, Vulpecula\_36,

Genes that do not have the "Most Annotated" start:

- Antrice\_46, Eesa\_36, Gravel\_46, KendraB23\_47, Orcanus\_37, Pelletreau\_46, TaylorSipt\_37, Toad24\_39, Westrich\_45,

### Summary by start number:

Start 9:

- Found in 13 of 47 ( 27.7% ) of genes in pham
- Manual Annotations of this start: 5 of 29
- Called 76.9% of time when present
- Phage (with cluster) where this start called: Eesa\_36 (AS1), Gravel\_46 (AS1), KendraB23\_47 (AS1), Orcanus\_37 (AS1), Pelletreau\_46 (AS1), Ruchi\_36 (AS1), TaylorSipt\_37 (AS1), Toad24\_39 (AS1), Vulpecula\_36 (AS1), Westrich\_45 (AS1),

Start 10:

- Found in 1 of 47 ( 2.1% ) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antrice\_46 (AS2),

Start 11:

- Found in 38 of 47 ( 80.9% ) of genes in pham
- Manual Annotations of this start: 24 of 29
- Called 94.7% of time when present
- Phage (with cluster) where this start called: Abidatro\_37 (AS1), Amelia\_39 (AS2), AmiCi24\_38 (AS3), Andrew\_40 (AS3), Atlantica\_39 (AS3), Basilisk\_37 (AS1), Bedetta\_44 (AS2), Bibble12\_43 (AS2), Brynnie\_36 (AS1), Camara\_39 (AS3), Chickaboom\_38 (AS1), Colusalem\_42 (AS2), Coral\_39 (AS2), Cote\_41 (AS2), Daob\_41 (AS2), Galaxy\_36 (AS1), Glotell\_41 (AS3), HamCheese\_38 (AS3), HannahPhantana\_40 (AS2), Jamun\_36 (AS1), Jerole\_49 (AS2), Juno112\_38 (AS3), KHumphrey\_39 (AS3), Kepler\_41 (AS2), Kuleana\_40 (AS2), Leona\_38 (AS3), LittleTokyo\_39 (AS2), Lunar\_41 (AS2), Melons\_41 (AS2), PhluffyCoco\_39 (AS3), Polka\_39 (AS2), Rattail\_39 (AS3), RedFox\_39 (AS3), Renna12\_38 (AS3), StuartMinion\_34 (AS3), Zhuangyuan\_43 (AS2),

### Summary by clusters:

There are 3 clusters represented in this pham: AS3, AS2, AS1,

Info for manual annotations of cluster AS1:

- Start number 9 was manually annotated 5 times for cluster AS1.
- Start number 11 was manually annotated 6 times for cluster AS1.

Info for manual annotations of cluster AS2:

- Start number 11 was manually annotated 11 times for cluster AS2.

Info for manual annotations of cluster AS3:

- Start number 11 was manually annotated 7 times for cluster AS3.

**Gene Information:**

Gene: Abidatro\_37 Start: 25098, Stop: 25304, Start Num: 11

Candidate Starts for Abidatro\_37:

(Start: 11 @25098 has 24 MA's), (12, 25110), (18, 25179),

Gene: Amelia\_39 Start: 24861, Stop: 25067, Start Num: 11

Candidate Starts for Amelia\_39:

(3, 24756), (Start: 11 @24861 has 24 MA's), (15, 24891), (17, 24915), (18, 24942),

Gene: AmiCi24\_38 Start: 24772, Stop: 25002, Start Num: 11

Candidate Starts for AmiCi24\_38:

(Start: 11 @24772 has 24 MA's), (15, 24802), (17, 24826), (18, 24853),

Gene: Andrew\_40 Start: 24666, Stop: 24896, Start Num: 11

Candidate Starts for Andrew\_40:

(Start: 11 @24666 has 24 MA's), (15, 24696), (17, 24720), (18, 24747),

Gene: Antrice\_46 Start: 26009, Stop: 26257, Start Num: 10

Candidate Starts for Antrice\_46:

(10, 26009), (15, 26045), (17, 26069), (18, 26096), (19, 26138),

Gene: Atlantica\_39 Start: 24774, Stop: 25004, Start Num: 11

Candidate Starts for Atlantica\_39:

(Start: 11 @24774 has 24 MA's), (15, 24804), (17, 24828), (18, 24855),

Gene: Basilisk\_37 Start: 25576, Stop: 25815, Start Num: 11

Candidate Starts for Basilisk\_37:

(7, 25561), (Start: 9 @25567 has 5 MA's), (Start: 11 @25576 has 24 MA's), (12, 25588), (18, 25657),

Gene: Bedetta\_44 Start: 25008, Stop: 25214, Start Num: 11

Candidate Starts for Bedetta\_44:

(3, 24903), (Start: 11 @25008 has 24 MA's), (15, 25038), (17, 25062), (18, 25089),

Gene: Bible12\_43 Start: 24856, Stop: 25062, Start Num: 11

Candidate Starts for Bible12\_43:

(3, 24751), (Start: 11 @24856 has 24 MA's), (15, 24886), (17, 24910), (18, 24937),

Gene: Brynnie\_36 Start: 25454, Stop: 25693, Start Num: 11

Candidate Starts for Brynnie\_36:

(7, 25439), (Start: 9 @25445 has 5 MA's), (Start: 11 @25454 has 24 MA's), (12, 25466), (18, 25535),

Gene: Camara\_39 Start: 24776, Stop: 25006, Start Num: 11

Candidate Starts for Camara\_39:

(Start: 11 @24776 has 24 MA's), (15, 24806), (17, 24830), (18, 24857),

Gene: Chickaboom\_38 Start: 25076, Stop: 25315, Start Num: 11

Candidate Starts for Chickaboom\_38:

(1, 24824), (2, 24881), (5, 25022), (8, 25061), (Start: 11 @25076 has 24 MA's), (18, 25157),

Gene: Colusalem\_42 Start: 24838, Stop: 25044, Start Num: 11

Candidate Starts for Colusalem\_42:

(3, 24733), (Start: 11 @24838 has 24 MA's), (15, 24868), (17, 24892), (18, 24919),

Gene: Coral\_39 Start: 24709, Stop: 24915, Start Num: 11

Candidate Starts for Coral\_39:

(3, 24604), (Start: 11 @24709 has 24 MA's), (15, 24739), (17, 24763), (18, 24790),

Gene: Cote\_41 Start: 25186, Stop: 25392, Start Num: 11

Candidate Starts for Cote\_41:

(3, 25081), (Start: 11 @25186 has 24 MA's), (15, 25216), (17, 25240), (18, 25267),

Gene: Daob\_41 Start: 25194, Stop: 25400, Start Num: 11

Candidate Starts for Daob\_41:

(Start: 11 @25194 has 24 MA's), (15, 25224), (17, 25248), (18, 25275),

Gene: Eesa\_36 Start: 25937, Stop: 26194, Start Num: 9

Candidate Starts for Eesa\_36:

(6, 25922), (Start: 9 @25937 has 5 MA's), (18, 26027),

Gene: Galaxy\_36 Start: 24864, Stop: 25070, Start Num: 11

Candidate Starts for Galaxy\_36:

(Start: 11 @24864 has 24 MA's), (12, 24876), (18, 24945), (20, 25029),

Gene: Glotell\_41 Start: 24932, Stop: 25162, Start Num: 11

Candidate Starts for Glotell\_41:

(Start: 11 @24932 has 24 MA's), (15, 24962), (17, 24986), (18, 25013), (19, 25055),

Gene: Gravel\_46 Start: 25916, Stop: 26167, Start Num: 9

Candidate Starts for Gravel\_46:

(6, 25901), (Start: 9 @25916 has 5 MA's), (18, 26006),

Gene: HamCheese\_38 Start: 24760, Stop: 24990, Start Num: 11

Candidate Starts for HamCheese\_38:

(Start: 11 @24760 has 24 MA's), (15, 24790), (17, 24814), (18, 24841), (19, 24883),

Gene: HannahPhantana\_40 Start: 24856, Stop: 25062, Start Num: 11

Candidate Starts for HannahPhantana\_40:

(3, 24751), (Start: 11 @24856 has 24 MA's), (15, 24886), (17, 24910), (18, 24937),

Gene: Jamun\_36 Start: 25116, Stop: 25355, Start Num: 11

Candidate Starts for Jamun\_36:

(4, 25056), (Start: 9 @25107 has 5 MA's), (Start: 11 @25116 has 24 MA's), (12, 25128), (16, 25161), (18, 25197),

Gene: Jerole\_49 Start: 24980, Stop: 25186, Start Num: 11

Candidate Starts for Jerole\_49:

(3, 24875), (Start: 11 @24980 has 24 MA's), (15, 25010), (17, 25034), (18, 25061),

Gene: Juno112\_38 Start: 24776, Stop: 25006, Start Num: 11

Candidate Starts for Juno112\_38:

(Start: 11 @24776 has 24 MA's), (15, 24806), (17, 24830), (18, 24857),

Gene: KHumphrey\_39 Start: 24775, Stop: 25005, Start Num: 11

Candidate Starts for KHumphrey\_39:  
(Start: 11 @24775 has 24 MA's), (15, 24805), (17, 24829), (18, 24856),

Gene: KendraB23\_47 Start: 26103, Stop: 26360, Start Num: 9  
Candidate Starts for KendraB23\_47:  
(6, 26088), (Start: 9 @26103 has 5 MA's), (18, 26193),

Gene: Kepler\_41 Start: 25604, Stop: 25810, Start Num: 11  
Candidate Starts for Kepler\_41:  
(3, 25499), (Start: 11 @25604 has 24 MA's), (15, 25634), (17, 25658), (18, 25685),

Gene: Kuleana\_40 Start: 25028, Stop: 25261, Start Num: 11  
Candidate Starts for Kuleana\_40:  
(Start: 11 @25028 has 24 MA's), (15, 25058), (18, 25109),

Gene: Leona\_38 Start: 24847, Stop: 25077, Start Num: 11  
Candidate Starts for Leona\_38:  
(Start: 11 @24847 has 24 MA's), (15, 24877), (17, 24901), (18, 24928),

Gene: LittleTokyo\_39 Start: 24706, Stop: 24936, Start Num: 11  
Candidate Starts for LittleTokyo\_39:  
(Start: 11 @24706 has 24 MA's), (15, 24736), (17, 24760), (18, 24787), (21, 24874), (22, 24922),

Gene: Lunar\_41 Start: 25520, Stop: 25726, Start Num: 11  
Candidate Starts for Lunar\_41:  
(3, 25415), (Start: 11 @25520 has 24 MA's), (15, 25550), (17, 25574), (18, 25601),

Gene: Melons\_41 Start: 25334, Stop: 25540, Start Num: 11  
Candidate Starts for Melons\_41:  
(3, 25229), (Start: 11 @25334 has 24 MA's), (15, 25364), (17, 25388), (18, 25415),

Gene: Orcanus\_37 Start: 25466, Stop: 25717, Start Num: 9  
Candidate Starts for Orcanus\_37:  
(6, 25451), (Start: 9 @25466 has 5 MA's), (18, 25556),

Gene: Pelletreau\_46 Start: 25916, Stop: 26167, Start Num: 9  
Candidate Starts for Pelletreau\_46:  
(6, 25901), (Start: 9 @25916 has 5 MA's), (18, 26006),

Gene: PhluffyCoco\_39 Start: 24772, Stop: 25002, Start Num: 11  
Candidate Starts for PhluffyCoco\_39:  
(Start: 11 @24772 has 24 MA's), (15, 24802), (17, 24826), (18, 24853), (19, 24895),

Gene: Polka\_39 Start: 24710, Stop: 24916, Start Num: 11  
Candidate Starts for Polka\_39:  
(Start: 11 @24710 has 24 MA's), (15, 24740), (17, 24764), (18, 24791),

Gene: Rattail\_39 Start: 24858, Stop: 25088, Start Num: 11  
Candidate Starts for Rattail\_39:  
(Start: 11 @24858 has 24 MA's), (15, 24888), (17, 24912), (18, 24939), (19, 24981),

Gene: RedFox\_39 Start: 24771, Stop: 25001, Start Num: 11  
Candidate Starts for RedFox\_39:

(Start: 11 @24771 has 24 MA's), (15, 24801), (17, 24825), (18, 24852),

Gene: Renna12\_38 Start: 24811, Stop: 25059, Start Num: 11

Candidate Starts for Renna12\_38:

(Start: 11 @24811 has 24 MA's), (15, 24841), (17, 24865), (18, 24892),

Gene: Ruchi\_36 Start: 25513, Stop: 25761, Start Num: 9

Candidate Starts for Ruchi\_36:

(7, 25507), (Start: 9 @25513 has 5 MA's), (Start: 11 @25522 has 24 MA's), (12, 25534), (18, 25603),

Gene: StuartMinion\_34 Start: 21830, Stop: 22069, Start Num: 11

Candidate Starts for StuartMinion\_34:

(Start: 11 @21830 has 24 MA's), (15, 21860), (17, 21884), (18, 21911),

Gene: TaylorSipht\_37 Start: 24886, Stop: 25134, Start Num: 9

Candidate Starts for TaylorSipht\_37:

(Start: 9 @24886 has 5 MA's), (13, 24910), (14, 24922),

Gene: Toad24\_39 Start: 26156, Stop: 26413, Start Num: 9

Candidate Starts for Toad24\_39:

(6, 26141), (Start: 9 @26156 has 5 MA's), (18, 26246),

Gene: Vulpecula\_36 Start: 25190, Stop: 25438, Start Num: 9

Candidate Starts for Vulpecula\_36:

(7, 25184), (Start: 9 @25190 has 5 MA's), (Start: 11 @25199 has 24 MA's), (12, 25211), (18, 25280),

Gene: Westrich\_45 Start: 25840, Stop: 26091, Start Num: 9

Candidate Starts for Westrich\_45:

(6, 25825), (Start: 9 @25840 has 5 MA's), (18, 25930),

Gene: Zhuangyuan\_43 Start: 25541, Stop: 25783, Start Num: 11

Candidate Starts for Zhuangyuan\_43:

(Start: 11 @25541 has 24 MA's), (18, 25622),